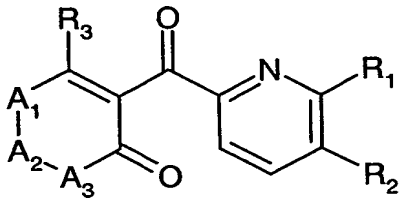
What is claimed is:

1. A compound of formula I



(I),

wherein

R_1 is $-L_{10}-R_4$, $-L_{11}-X_1-R_5$, $-NR_6R_7$, $-X_2-R_8$ or $-X_3-L_1-R_9$;

L_2, L_4, L_6 and L_8 are each independently of the others C_1-C_4alkylene which may be substituted once, twice or three times by C_1-C_4alkyl, halogen or by C_1-C_4alkoxy and to which C_1-C_4alkylene group there may additionally be spirocyclically bound a C_2-C_5alkylene group, and wherein that C_2-C_5alkylene group may in turn be interrupted once or twice by oxygen, sulfur, sulfinyl or by sulfonyl and/or substituted by C_1-C_4alkyl or by C_1-C_4alkoxy;

L_3, L_5, L_7 and L_9 are each independently of the others C_1-C_4alkylene which may be substituted once, twice or three times by C_1-C_4alkyl, halogen or by C_1-C_4alkoxy;

R_2 is halogen, C_1-C_4haloalkyl, cyano, C_1-C_3haloalkoxy, C_1-C_4alkylthio, C_1-C_4alkylsulfinyl, C_1-C_4alkylsulfonyl, C_1-C_4haloalkylthio, C_1-C_4haloalkylsulfinyl or C_1-C_4haloalkylsulfonyl;

L_{10} is a direct bond or a C_1-C_6alkylene, C_2-C_6alkenylene or C_2-C_6alkynylene group which may be substituted once, twice or three times by C_1-C_6alkyl, halogen, hydroxy, C_1-C_6alkoxy, C_3-C_6cycloalkyloxy, C_1-C_6alkoxy-C_1-C_6alkoxy, C_1-C_6alkoxy-C_1-C_6alkoxy-C_1-C_6alkoxy or by C_1-C_2alkylsulfonyloxy;

R_4 is halogen, cyano, rhodano, C_1-C_6alkoxycarbonyl, C_3-C_6alkenyloxycarbonyl, C_3-C_6alkynyloxycarbonyl, benzyloxycarbonyl, $C(O)NR_{25a}R_{26a}$, formyl, C_1-C_6alkylcarbonyl, C_1-C_6haloalkylcarbonyl, C_1-C_4alkoxy-C_1-C_4alkylcarbonyl, C_1-C_4alkoxy-C_1-C_4alkoxy-C_1-C_4alkylcarbonyl, N-(C_1-C_4alkyl)-C_1-C_4alkylsulfonylamino-C_1-C_4alkylcarbonyl, C_1-C_6haloalkyl, C_2-C_6alkenyl, C_2-C_6haloalkenyl, C_2-C_6alkynyl, C_2-C_6haloalkynyl, C_3-C_6cycloalkyl, C_1-C_6alkylsulfonyloxy or phenylsulfonyloxy, wherein the phenyl groups may be substituted by one or more C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxy, C_1-C_6haloalkoxy, halogen, cyano, hydroxy or nitro groups;

or R_4 is a three- to ten-membered, monocyclic or fused bicyclic ring system which may be aromatic, saturated or partially saturated and which may contain from 1 to 4 hetero atoms selected from nitrogen, oxygen and sulfur, and wherein the ring system may contain not more than 2 oxygen atoms and not more than two sulfur atoms, and each ring system may

itself be substituted once, twice or three times by C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_4alkoxy-C_1-C_2alkyl, C_2-C_6alkenyl, C_2-C_6haloalkenyl, C_2-C_6alkynyl, C_2-C_6haloalkynyl, C_1-C_6alkoxy, hydroxy, C_1-C_6haloalkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, mercapto, C_1-C_6alkylthio, C_1-C_6haloalkylthio, C_3-C_6alkenylthio, C_3-C_6haloalkenylthio, C_3-C_6alkynylthio, C_2-C_5alkoxy-alkylthio, C_3-C_5acetylalkylthio, C_3-C_6alkoxycarbonylalkylthio, C_2-C_4cyanoalkylthio, C_1-C_6alkyl-sulfinyl, C_1-C_6haloalkylsulfinyl, C_1-C_6alkylsulfonyl, C_1-C_6haloalkylsulfonyl, aminosulfonyl, C_1-C_2alkylaminosulfonyl, di(C_1-C_2alkyl)aminosulfonyl, di(C_1-C_4alkyl)amino, halogen, cyano, nitro, phenyl or by benzylthio, and wherein phenyl and benzylthio may in turn be substituted on the phenyl ring by C_1-C_3alkyl, C_1-C_3haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, halogen, cyano or by nitro, and wherein the substituent on the nitrogen in the heterocyclic ring are other than halogen;

or R_4 is hydrogen when L_{10} is a C_1-C_6alkylene group which may be substituted once, twice or three times by C_1-C_6alkyl or by halogen; or when L_{10} is a C_2-C_6alkenylene or C_2-C_6alkynylene group which may be substituted once, twice or three times by C_1-C_6alkyl, halogen, hydroxy, C_1-C_6alkoxy, C_3-C_6cycloalkyloxy, C_1-C_6alkoxy-C_1-C_6alkoxy, C_1-C_6alkoxy-C_1-C_6alkoxy-C_1-C_6-alkoxy or by C_1-C_2alkylsulfonyloxy;

R_{25a} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3-haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{26a} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{25a} together with R_{26a} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3-haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

L_{11} is a C_1-C_6alkylene, C_2-C_6alkenylene or C_2-C_6alkynylene group which may be substituted once, twice or three times by halogen, hydroxy, C_1-C_6alkoxy, C_3-C_6cycloalkyloxy, C_1-C_6-alkoxy-C_1-C_6alkoxy, C_1-C_6alkoxy-C_1-C_6alkoxy-C_1-C_6alkoxy or by C_1-C_2alkylsulfonyloxy;

X_1 is oxygen, -OC(O)-, -C(O)-, -C(=NR_{14a})-, -C(O)O-, -C(O)NR_{14b}-, -OC(O)O-, -N(R_{10})-O-, -O-NR_{11}-, thio, sulfinyl, sulfonyl, -SO_2NR_{12}-, -$NR_{13}SO_2$-, -N(SO_2R_{14c})-, -N(R_{14d})C(O)- or -NR_{14}-;

R_{10}, R_{11}, R_{12}, R_{13}, R_{14b}, R_{14d} and R_{14} are each independently of the others hydrogen, C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxycarbonyl, C_1-C_6alkylcarbonyl, C_1-C_6alkoxy-C_1-C_6alkyl,

or C_1-C_6alkoxy-C_1-C_6alkyl substituted by C_1-C_6alkoxy, or benzyl or phenyl, wherein phenyl and benzyl may in turn be substituted once, twice or three times by C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxy, C_1-C_6haloalkoxy, halogen, cyano, hydroxy or by nitro;
R_{14a} is hydroxy, C_1-C_6alkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy or benzyloxy;
R_{14c} is C_1-C_6alkyl;
R_5 is hydrogen or a C_1-C_8alkyl, C_3-C_8alkenyl or C_3-C_8alkynyl or C_3-C_6cycloalkyl group which may be substituted once, twice or three times by chlorine, bromine, iodine, hydroxy, amino, formyl, nitro, cyano, mercapto, C_1-C_6alkoxy, C_2-C_6alkenyl, C_2-C_6haloalkenyl, C_2-C_6alkynyl, C_2-C_6haloalkynyl, C_3-C_6cycloalkyl, halo-substituted C_3-C_6cycloalkyl, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, C_1-C_6haloalkoxy, C_3-C_6haloalkenyloxy, cyano-C_1-C_6alkoxy, C_1-C_6alkoxy-C_1-C_6alkoxy, C_1-C_6alkoxy-C_1-C_6alkoxy-C_1-C_6alkoxy, C_1-C_6alkylthio-C_1-C_6alkoxy, C_1-C_6alkylsulfinyl-C_1-C_6alkoxy, C_1-C_6alkylsulfonyl-C_1-C_6alkoxy, C_1-C_6alkoxycarbonyl-C_1-C_6alkoxy, C_1-C_6alkoxycarbonyl, C_1-C_6alkylcarbonyl, phenylcarbonyl, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6alkylsulfonyl, C_1-C_6haloalkylthio, C_1-C_6haloalkylsulfinyl, C_1-C_6haloalkylsulfonyl, benzyloxy, benzylthio, benzylsulfinyl, benzylsulfonyl, C_1-C_6alkylamino, di(C_1-C_6alkyl)amino, $R_{15a}C(X_{23})N(R_{18a})$-, $R_{16a}N(R_{17a})C(X_{24})$-, $R_{16b}N(R_{17b})C(X_{25})NR_{18b}$-, $R_{15c}SO_2N(R_{18c})$-, $R_{16c}N(R_{17c})C(X_{26})O$-, $R_{15b}C(X_{27})O$-, $R_{19}R_{20}C{=}NO$-, $R_{15}S(O)_2O$-, $R_{16}N(R_{17})SO_2$-, rhodano, phenyl, phenoxy, phenylthio, phenylsulfinyl or by phenylsulfonyl or which may be substituted from one to seventeen times by fluorine; wherein the phenyl- or benzyl-containing groups may in turn be substituted by one or more C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxy, C_1-C_6haloalkoxy, halogen, cyano, hydroxy or nitro groups;
R_{15a}, R_{15b} and R_{15c} are hydrogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_3-C_6cycloalkyl, phenyl, benzyl, C_1-C_6alkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy or benzyloxy, wherein the phenyl groups may be substituted once, twice or three times by C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxy, C_1-C_6haloalkoxy, halogen, cyano, hydroxy or by nitro;
R_{16a}, R_{16b} and R_{16c} are hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl, C_3-C_6alkynyl, C_3-C_6cycloalkyl or phenyl, wherein phenyl may be substituted once, twice or three times by C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxy, C_1-C_6haloalkoxy, halogen, cyano, hydroxy or by nitro;
R_{17a}, R_{17b}, R_{17c}, R_{18a}, R_{18b} and R_{18c} are hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;
X_{23}, X_{24}, X_{25}, X_{26} and X_{27} are oxygen or sulfur;
R_{15}, R_{16}, R_{17}, R_{19} and R_{20} are each independently of the others hydrogen, C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxycarbonyl, C_1-C_6alkylcarbonyl, C_1-C_6alkoxy-C_1-C_6alkyl, or C_1-C_6alkoxy-C_1-C_6alkyl substituted by C_1-C_6alkoxy, or benzyl or phenyl, wherein phenyl and

benzyl may in turn be substituted once, twice or three times by C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxy, C_1-C_6haloalkoxy, halogen, cyano, hydroxy or by nitro;
or R_5 is a three- to ten-membered monocyclic or fused bicyclic ring system which may be aromatic, saturated or partially saturated and may contain from 1 to 4 hetero atoms selected from nitrogen, oxygen and sulfur, and wherein the ring system is bound to the substituent X_1 directly or *via* a C_1-C_4alkylene, C_2-C_4alkenylene, C_2-C_4alkynylene, -N(R_{18})-C_1-C_4alkylene, -O-C_1-C_4alkylene, -S-C_1-C_4alkylene, -S(O)-C_1-C_4alkylene or -SO_2-C_1-C_4alkylene chain, wherein the ring system may not be interrupted by -C(=O)-, -C(=S)-, -C(=NR_{5a})-, -N(=O)-, -S(=O)- or by -SO_2-, and each ring system may contain not more than 2 oxygen atoms and not more than two sulfur atoms, and the ring system itself may be substituted once, twice or three times by C_1-C_6alkyl, C_1-C_6haloalkyl, C_2-C_6alkenyl, C_2-C_6haloalkenyl, C_2-C_6alkynyl, C_2-C_6haloalkynyl, C_1-C_6alkoxy, hydroxy, C_1-C_6haloalkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, mercapto, C_1-C_6alkylthio, C_1-C_6haloalkylthio, C_3-C_6alkenylthio, C_3-C_6haloalkenylthio, C_3-C_6-alkynylthio, C_2-C_5alkoxyalkylthio, C_3-C_5acetylalkylthio, C_3-C_6alkoxycarbonylalkylthio, C_2-C_4-cyanoalkylthio, C_1-C_6alkylsulfinyl, C_1-C_6haloalkylsulfinyl, C_1-C_6alkylsulfonyl, C_1-C_6haloalkyl-sulfonyl, aminosulfonyl, C_1-C_2alkylaminosulfonyl, di(C_1-C_2alkyl)aminosulfonyl, di(C_1-C_4alkyl)-amino, halogen, cyano, nitro, phenyl or by benzylthio, wherein phenyl and benzylthio may in turn be substituted on the phenyl ring by C_1-C_3alkyl, C_1-C_3haloalkyl, C_1-C_3alkoxy, C_1-C_3-haloalkoxy, halogen, cyano or by nitro, and wherein the substituents on the nitrogen in the heterocyclic ring are other than halogen;
R_{5a} is C_1-C_6alkyl, hydroxy, C_1-C_6alkoxy, cyano or nitro;
R_{18} is hydrogen, C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxycarbonyl, C_1-C_6alkylcarbonyl, C_1-C_6alkoxy-C_1-C_6alkyl, or C_1-C_6alkoxy-C_1-C_6alkyl substituted by C_1-C_6alkoxy, or benzyl or phenyl, wherein phenyl and benzyl may in turn be substituted once, twice or three times by C_1-C_6alkyl, C_1-C_6haloalkyl, C_1-C_6alkoxy, C_1-C_6haloalkoxy, halogen, cyano, hydroxy or by nitro;

R_6 is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl, C_3-C_6alkynyl, C_1-C_6haloalkyl, hydroxy, C_1-C_6alkoxy, -C(O)R_{19a} or -C(S)R_{20a};
R_{19a} and R_{20a} are each independently of the other hydrogen, C_1-C_6alkyl, C_3-C_6cycloalkyl, phenyl, benzyl, heteroaryl, C_1-C_6alkoxy, C_3-C_6alkenyloxy, benzyloxy, C_1-C_4alkylthio or a group N$R_{21}R_{22}$;
R_{21} and R_{22} are each independently of the other hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl, C_3-C_6alkynyl or phenyl, and wherein phenyl, benzyl, benzyloxy and heteroaryl in R_{19a}, R_{20a},

R_{21} and R_{22} may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
or R_{21} together with R_{22} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
or R_6 is $-L_2$-X_4-R_{24}; wherein
X_4 is oxygen, $-NR_{23}$-, -S-, -S(O)- or $-S(O)_2$-;
R_{23} is hydrogen, C_1-C_6alkoxy, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or is phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
R_{24} is hydrogen or a C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group, which groups may be substituted once, twice or three times by halogen, hydroxy, C_1-C_6alkoxy, C_1-C_3alkoxy-C_1-C_3alkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6-alkylsulfonyl, cyano, $C(X_5)NR_{25}R_{26}$, C_3-C_6cycloalkyl, phenyl, phenoxy or by 5- or 6-membered heteroaryl or heteroaryloxy, wherein heteroaryl or heteroaryloxy may in turn be interrupted once by oxygen or by sulfur or once, twice or three times by nitrogen and may be bonded to the C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group either *via* a C atom or *via* a N atom, and wherein the phenyl– and heteroaryl-containing groups may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
or R_{24} is $C(O)$-R_{74} or $C(S)$-R_{75};
X_5 is oxygen or sulfur;
R_{25} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
R_{26} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;
or R_{25} together with R_{26} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or

substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

or R_6 is -L_3-R_{27};

R_{27} is formyl, C_1-C_6alkylcarbonyl, C_3-C_6cycloalkylcarbonyl, benzoyl, C_1-C_6alkoxycarbonyl, cyano, $C(X_6)NR_{28}R_{29}$, phenyl or heteroaryl, wherein benzoyl and phenyl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

and wherein heteroaryl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro or by C_1-C_4alkoxycarbonyl;

or R_{27} is C_3-C_6cycloalkyl or C_5-C_6cycloalkenyl each of which may in turn be substituted once, twice or three times by C_1-C_4alkyl, halogen or by C_1-C_4alkoxy;

X_6 is oxygen or sulfur;

R_{28} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{29} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;.

or R_{28} together with R_{29} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_7 is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl, C_3-C_6alkynyl, C_1-C_6haloalkyl, C_3-C_6cycloalkyl, phenyl, benzyl, heteroaryl, $C(X_7)R_{30}$ or $NR_{33}R_{34}$, wherein phenyl, benzyl and heteroaryl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

X_7 is oxygen or sulfur;

R_{30} is hydrogen, C_1-C_6alkyl, C_3-C_6cycloalkyl, phenyl, heteroaryl, C_1-C_6alkoxy, C_3-C_6alkenyloxy, benzyloxy, C_1-C_4alkylthio or a group $NR_{31}R_{32}$;

R_{31} and R_{33} are each independently of the other hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{32} and R_{34} are each independently of the other hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{31} together with R_{32} or R_{33} together with R_{34}, in each case with the respective N atom to which they are bonded, form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

or R_7 is $-L_4$-X_8-R_{35}; wherein

X_8 is oxygen, $-NR_{36}$-, -S-, -S(O)- or $-S(O)_2$-;

R_{36} is hydrogen, C_1-C_6alkoxy, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or is phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{35} is hydrogen or a C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group, which groups may be substituted once, twice or three times by halogen, hydroxy, C_1-C_6alkoxy, C_1-C_3alkoxy-C_1-C_3alkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6alkylsulfonyl, cyano, $C(X_9)NR_{37}R_{38}$, C_3-C_6cycloalkyl, phenyl, phenoxy or by 5- or 6-membered heteroaryl or heteroaryloxy, wherein heteroaryl or heteroaryloxy may in turn be interrupted once by oxygen or by sulfur or once, twice or three times by nitrogen and may be bonded to the C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group either *via* a C atom or *via* a N atom, and wherein the phenyl– and heteroaryl-containing groups may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

X_9 is oxygen or sulfur;

R_{37} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3halo-

alkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
R_{38} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;
or R_{37} together with R_{38} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
or R_7 is -L_5-R_{39};
R_{39} is formyl, C_1-C_6alkylcarbonyl, C_3-C_6cycloalkylcarbonyl, benzoyl, C_1-C_6alkoxycarbonyl, cyano, $C(X_{10})NR_{40}R_{41}$, phenyl or heteroaryl, wherein benzoyl and phenyl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
and wherein heteroaryl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro or by C_1-C_4alkoxycarbonyl;
or R_{39} is C_3-C_6cycloalkyl or C_5-C_6cycloalkenyl each of which may in turn be substituted once, twice or three times by C_1-C_4alkyl, halogen or by C_1-C_4alkoxy;
X_{10} is oxygen or sulfur;
R_{40} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
R_{41} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;
or R_{40} together with R_{41} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
or R_6 and R_7 together with the nitrogen atom to which they are bonded form a carbocyclic 3- to 7-membered, saturated or partially saturated or unsaturated monocyclic or bicyclic ring system which may be interrupted once by oxygen, once by sulfur, from one to three times by nitrogen and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl,

C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3-haloalkylthio, cyano, nitro or by C_1-C_4alkoxycarbonyl; wherein each ring system may not be interrupted by –C(=O)-, -C(=S)-, -C(=NR_{5a})-, -N(=O)-, -S(=O)- or by -SO_2-;

R_{5a} is C_1-C_6alkyl, hydroxy, C_1-C_6alkoxy, cyano or nitro;

X_2 is oxygen, -NR_{42}-, sulfur, -S(O)- or -$S(O)_2$-;

R_{42} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl, C_3-C_6alkynyl, C_1-C_6haloalkyl, C_3-C_6cycloalkyl, phenyl, heteroaryl, $C(X_{11})R_{43}$ or $NR_{46}R_{47}$;

X_{11} is oxygen or sulfur;

R_{43} is hydrogen, C_1-C_6alkyl, C_3-C_6cycloalkyl, phenyl, heteroaryl, C_1-C_6alkoxy, C_3-C_6alkenyl-oxy, benzyloxy, C_1-C_4alkylthio or a group $NR_{44}R_{45}$;

R_{44} and R_{46} are each independently of the other hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkyl-carbonylamino;

R_{45} and R_{47} are each independently of the other hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{44} together with R_{45} or R_{46} together with R_{47}, in each case with the respective N atom to which they are bonded, form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkyl-sulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonyl-amino;

or R_{42} is -L_6-X_{12}-R_{48}; wherein

X_{12} is oxygen, -NR_{49}-, -S-, -S(O)- or -$S(O)_2$-;

R_{49} is hydrogen, C_1-C_6alkoxy, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or is phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3-alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3halo-alkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{48} is a C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group, which groups may be substituted once, twice or three times by halogen, hydroxy, C_1-C_6alkoxy, C_1-C_3alkoxy-C_1-C_3alkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6alkylsulfonyl, cyano, $C(X_{13})NR_{50}R_{51}$, C_3-C_6cycloalkyl, phenyl, phenoxy or by 5- or 6-membered heteroaryl or heteroaryloxy, wherein heteroaryl or heteroaryloxy may in turn be interrupted once by

oxygen or by sulfur or once, twice or three times by nitrogen and may be bonded to the C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group either *via* a C atom or *via* a N atom, and wherein the phenyl– and heteroaryl-containing groups may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

X_{13} is oxygen or sulfur;

R_{50} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{51} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{50} together with R_{51} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

or R_{42} is -L_7-R_{52};

R_{52} is formyl, C_1-C_6alkylcarbonyl, C_3-C_6cycloalkylcarbonyl, benzoyl, C_1-C_6alkoxycarbonyl, cyano, $C(X_{14})NR_{53}R_{54}$, phenyl or heteroaryl, wherein benzoyl and phenyl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

and wherein heteroaryl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro or by C_1-C_4alkoxycarbonyl;

or R_{52} is C_3-C_6cycloalkyl or C_5-C_6cycloalkenyl each of which may in turn be substituted once, twice or three times by C_1-C_4alkyl, halogen or by C_1-C_4alkoxy;

X_{14} is oxygen or sulfur;

R_{53} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{54} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{53} together with R_{54} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_8 is hydrogen or a C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group, which groups may be substituted once, twice or three times by halogen, hydroxy, C_1-C_6alkoxy, C_1-C_3alkoxy-C_1-C_3alkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6-alkylsulfonyl, cyano, $C(X_{15})NR_{55}R_{56}$, C_3-C_6cycloalkyl, phenyl, phenoxy or by 5- or 6-membered heteroaryl or heteroaryloxy, and wherein heteroaryl or heteroaryloxy may in turn be interrupted once by oxygen or by sulfur or once, twice or three times by nitrogen and may be bonded to the C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group either *via* a C atom or *via* a N atom, and wherein the phenyl– and heteroaryl-containing groups may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

X_{15} is oxygen or sulfur;

R_{55} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{56} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{55} together with R_{56} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

or R_8 is cyano, $C(O)$-R_{76} or $C(S)$-R_{77};

X_3 is oxygen, -NR_{57}-, sulfur, -$S(O)$- or -$S(O)_2$-;

R_{57} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl, C_3-C_6alkynyl, C_1-C_6haloalkyl, C_3-C_6cycloalkyl, phenyl, heteroaryl, $C(X_{16})R_{58}$ or $NR_{61}R_{62}$;

X_{16} is oxygen or sulfur;

R_{58} is hydrogen, C_1-C_6alkyl, C_3-C_6cycloalkyl, phenyl, heteroaryl, C_1-C_6alkoxy, C_3-C_6alkenyloxy, benzyloxy, C_1-C_4alkylthio or a group $NR_{59}R_{60}$;

R_{59} and R_{61} are each independently of the other hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{60} and R_{62} are each independently of the other hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{59} together with R_{60} or R_{61} together with R_{62}, in each case with the respective N atom to which they are bonded, form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

or R_{57} is $-L_8$-X_{17}-R_{63}; wherein

X_{17} is oxygen, $-NR_{64}$-, -S-, -S(O)- or $-S(O)_2$-;

R_{64} is hydrogen, C_1-C_6alkoxy, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or is phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{63} is a C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group, which groups may be substituted once, twice or three times by halogen, hydroxy, C_1-C_6alkoxy, C_1-C_3alkoxy-C_1-C_3alkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6alkylsulfonyl, cyano, $C(X_{18})NR_{65}R_{66}$, C_3-C_6cycloalkyl, phenyl, phenoxy or by 5- or 6-membered heteroaryl or heteroaryloxy, wherein heteroaryl or heteroaryloxy may in turn be interrupted once by oxygen or by sulfur or once, twice or three times by nitrogen and may be bonded to the C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group either *via* a C atom or *via* a N atom, and wherein the phenyl– and heteroaryl-containing groups may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

X_{18} is oxygen or sulfur;

R_{65} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3halo-

alkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{66} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{65} together with R_{66} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

or R_{57} is -L_9-R_{67};

R_{67} is formyl, C_1-C_6alkylcarbonyl, C_3-C_6cycloalkylcarbonyl, benzoyl, C_1-C_6alkoxycarbonyl, cyano, $C(X_{19})NR_{68}R_{69}$, phenyl or heteroaryl, wherein benzoyl and phenyl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

and wherein heteroaryl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro or by C_1-C_4alkoxycarbonyl; or R_{67} is C_3-C_6cycloalkyl or C_5-C_6cycloalkenyl each of which may in turn be substituted once, twice or three times by C_1-C_4alkyl, halogen or by C_1-C_4alkoxy;

X_{19} is oxygen or sulfur;

R_{68} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{69} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{68} together with R_{69} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

L_1 is C_1-C_4alkylene which may be substituted once, twice or three times by C_1-C_4alkyl, halogen or by C_1-C_4alkoxy and to which C_1-C_4alkylene group there may be spirocyclically bound a further C_2-C_5alkylene group which may in turn be interrupted once or twice by oxygen, sulfur, sulfinyl or by sulfonyl and/or substituted by C_1-C_4alkyl or by C_1-C_4alkoxy;

or L_1 is C_1-C_4alkylene which may be substituted once, twice or three times by C_1-C_4alkyl, halogen or by C_1-C_4alkoxy, and wherein a carbon atom of that C_1-C_4alkylene group together with R_9 or with R_{70} forms, by means of a further C_2-C_6alkylene chain, a ring system which may additionally be interrupted once or twice by oxygen, sulfur, sulfinyl or by sulfonyl and/or substituted by C_1-C_4alkyl or by C_1-C_4alkoxy; R_9 is a group $-X_{20}$-R_{70}, wherein
X_{20} is oxygen, -NR_{71}-, -S-, -S(O)- or -$S(O)_2$-;
R_{71} is hydrogen or a C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group, which groups may be substituted once, twice or three times by halogen, hydroxy, C_1-C_6alkoxy, C_1-C_3alkoxy-C_1-C_3alkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6-alkylsulfonyl, cyano, $C(X_{21})NR_{72}R_{73}$, C_3-C_6cycloalkyl, phenyl, phenoxy or by 5- or 6-membered heteroaryl or heteroaryloxy, wherein heteroaryl or heteroaryloxy may in turn be interrupted once by oxygen or by sulfur or once, twice or three times by nitrogen and may be bonded to the C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group either *via* a C atom or *via* a N atom, and wherein the phenyl– and heteroaryl-containing groups may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
X_{21} is oxygen or sulfur;
R_{72} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
R_{73} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;
or R_{72} together with R_{73} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;
R_{70} is hydrogen or a C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group, which groups may be substituted once, twice or three times by halogen, hydroxy, C_1-C_6alkoxy, C_1-C_3alkoxy-C_1-C_3alkoxy, C_3-C_6alkenyloxy, C_3-C_6alkynyloxy, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6-alkylsulfonyl, cyano, $C(X_{15a})NR_{55a}R_{56a}$, C_3-C_6cycloalkyl, phenyl, phenoxy or by 5- or 6-membered heteroaryl or heteroaryloxy, and wherein heteroaryl or heteroaryloxy may in turn be interrupted once by oxygen or by sulfur or once, twice or three times by nitrogen and may

be bonded to the C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl group either *via* a C atom or *via* a N atom, and wherein the phenyl– and heteroaryl-containing groups may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

X_{15a} is oxygen or sulfur;

R_{55a} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{56a} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{55a} together with R_{56a} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

or R_{70} is C_1-C_{10}alkylideneimino, (phenyl-C_1-C_4alkylidene)imino, or phenyl, wherein phenyl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3-alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

or R_{70} is cyano, C(O)-R_{78} or C(S)-R_{79};

or R_9 is formyl, C_1-C_6alkylcarbonyl, C_3-C_6cycloalkylcarbonyl, benzoyl, C_1-C_6alkoxycarbonyl, cyano, C(X_{35})N$R_{125}R_{126}$, phenyl or heteroaryl, wherein benzoyl and phenyl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

and wherein heteroaryl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro or by C_1-C_4alkoxycarbonyl;

or R_9 is C_3-C_6cycloalkyl or C_5-C_6cycloalkenyl each of which may in turn be substituted once, twice or three times by C_1-C_4alkyl, halogen or by C_1-C_4alkoxy;

X_{35} is oxygen or sulfur;

R_{125} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy,

C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{126} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{125} together with R_{126} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{74}, R_{75}, R_{76}, R_{77}, R_{78} and R_{79} are each independently of the others hydrogen, C_1-C_6alkyl, C_3-C_6cycloalkyl, phenyl, benzyl, heteroaryl, C_1-C_6alkoxy, C_3-C_6alkenyloxy, benzyloxy, C_1-C_4alkylthio or $NR_{127}R_{128}$, wherein phenyl, benzyl or heteroaryl may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{127} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl or phenyl which may be substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_{128} is hydrogen, C_1-C_6alkyl, C_3-C_6alkenyl or C_3-C_6alkynyl;

or R_{127} together with R_{128} and the respective N atom to which they are bonded form a carbocyclic 3- to 6-membered ring which may be interrupted by oxygen or by sulfur and/or substituted once, twice or three times by halogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3alkoxy, C_1-C_3haloalkoxy, C_1-C_3alkylthio, C_1-C_3alkylsulfinyl, C_1-C_3alkylsulfonyl, C_1-C_3haloalkylthio, cyano, nitro, C_1-C_4alkoxycarbonyl or by C_1-C_4alkylcarbonylamino;

R_3 is hydroxy, O^-M^+ wherein M^+ is a metal cation or an ammonium cation, or is halogen or $S(O)_pR_{80}$, wherein

p is 0, 1 or 2;

R_{80} is C_1-C_{12}alkyl, C_2-C_{12}alkenyl, C_2-C_{12}alkynyl, C_3-C_{12}allenyl, C_3-C_{12}cycloalkyl or C_5-C_{12}-cycloalkenyl;

or R_{80} is R_{121}-C_1-C_{12}alkylene or R_{122}-C_2-C_{12}alkenylene, wherein the alkylene or alkenylene chain may be interrupted by –O-, -S-, -S(O)-, -SO_2- or by -C(O)- and/or substituted from one to five times by R_{123};

or R_{80} is phenyl which may be substituted once, twice, three times, four times or five times by R_{124};

R_{121} and R_{122} are each independently of the other halogen, cyano, rhodano, hydroxy, C_1-C_6alkoxy, C_2-C_6alkenyloxy, C_2-C_6alkynyloxy, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6alkylsulfonyl, C_2-C_6alkenylthio, C_2-C_6alkynylthio, C_1-C_6alkylsulfonyloxy, phenylsulfonyloxy, C_1-C_6alkylcarbonyloxy, benzoyloxy, C_1-C_4alkoxycarbonyloxy, C_1-C_6alkylcarbonyl, C_1-C_4alkoxycarbonyl, benzoyl, aminocarbonyl, C_1-C_4alkylaminocarbonyl, C_3-C_6cycloalkyl, phenyl, phenoxy, phenylthio, phenylsulfinyl or phenylsulfonyl, wherein the phenyl-containing groups may in turn be substituted once, twice or three times by halogen, C_1-C_3alkyl, C_1-C_3haloalkyl, hydroxy, C_1-C_3alkoxy, C_1-C_3haloalkoxy, cyano or by nitro;

R_{123} is hydroxy, halogen, C_1-C_6alkyl, C_1-C_6alkoxy, C_1-C_6alkylthio, C_1-C_6alkylsulfinyl, C_1-C_6alkylsulfonyl, cyano, carbamoyl, carboxy, C_1-C_4alkoxycarbonyl or phenyl, wherein phenyl may be substituted once, twice or three times by hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_3-C_4alkenyl, C_3-C_4alkynyl or by C_1-C_4alkoxy;

R_{124} is halogen, C_1-C_3alkyl, C_1-C_3haloalkyl, hydroxy, C_1-C_3alkoxy, C_1-C_3haloalkoxy, cyano or nitro;

A_1 is $-C(R_{112}R_{113})-$ or $-NR_{114}-$;

A_2 is $-C(R_{115}R_{116})_m-$, $-C(=O)-$, $-O-$, $-NR_{117}-$ or $-S(O)_q-$;

A_3 is $-C(R_{118}R_{119})-$ or $-NR_{120}-$;

with the proviso that A_2 is other than $-O-$ or $-S(O)_q-$ when A_1 is $-NR_{114}-$ and/or A_3 is $-NR_{120}$;

R_{112} and R_{118} are each independently of the other hydrogen, C_1-C_4alkyl, C_2-C_4alkenyl, C_2-C_4alkynyl, C_1-C_4alkylthio, C_1-C_4alkylsulfinyl, C_1-C_4alkylsulfonyl, C_1-C_4alkoxycarbonyl, hydroxy, C_1-C_4alkoxy, C_3-C_4alkenyloxy, C_3-C_4alkynyloxy, hydroxy-C_1-C_4alkyl, C_1-C_4alkylsulfonyloxy-C_1-C_4alkyl, halogen, cyano or nitro;

R_{113} and R_{119} are each independently of the other hydrogen, C_1-C_4alkyl or C_1-C_4alkylthio, C_1-C_4alkylsulfinyl or C_1-C_4alkylsulfonyl;

or R_{113} together with R_{112} and/or R_{119} together with R_{118} form a C_2-C_5alkylene chain which may be interrupted by $-O-$, $-C(O)O-$ or by $-S(O)_r-$;

R_{114} and R_{120} are each independently of the other hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_3-C_4alkenyl, C_3-C_4alkynyl or C_1-C_4alkoxy;

R_{115} is hydrogen, hydroxy, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_3hydroxyalkyl, C_1-C_4alkoxy-C_1-C_3alkyl, C_1-C_4alkylthio-C_1-C_3alkyl, C_1-C_4alkylcarbonyloxy-C_1-C_3alkyl, C_1-C_4alkylsulfonyloxy-C_1-C_3alkyl, tosyloxy-C_1-C_3alkyl, di(C_1-C_4alkoxy)C_1-C_3alkyl, C_1-C_4alkoxycarbonyl, formyl, C_3-C_5oxacycloalkyl, C_3-C_5thiacycloalkyl, C_3-C_4dioxacycloalkyl, C_3-C_4dithiacycloalkyl, C_3-C_4oxathiacycloalkyl, C_1-C_4alkoxyiminomethyl, cyano, carbamoyl, C_1-C_4alkylaminocarbonyl or di(C_1-C_4alkyl)aminocarbonyl;

or R_{115} together with R_{112} or R_{113} or R_{114} or R_{116} or R_{118} or R_{119} or R_{120} or, when m is 2, also with a second R_{115} form a C_1-C_4alkylene bridge;

R_{116} is hydrogen, C_1-C_3alkyl or C_1-C_3haloalkyl;

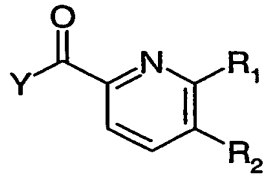
R_{117} is hydrogen, C_1-C_3alkyl, C_1-C_3haloalkyl, C_1-C_4alkoxycarbonyl, C_1-C_4alkylcarbonyl or di-(C_1-C_4alkyl)aminocarbonyl;

m is 1 or 2; and

q and r are each independently of the other 0, 1 or 2;

and also to agronomically acceptable salts, tautomers, isomers and enantiomers of those compounds.

2. A compound of formula II



(II),

wherein R_1 and R_2 are as defined for formula I in claim 1 and Y is C_1-C_4alkoxy, benzyloxy, hydroxy, fluorine, chlorine, bromine, cyano or phenoxy which may be substituted by an electron-withdrawing group.

3. A herbicidal composition which, besides comprising formulation adjuvants, comprises a herbicidally effective amount of compound of formula I.

4. A method of controlling grasses and weeds in crops of useful plants, which comprises applying a herbicidally effective amount of a compound of formula I or of a composition comprising such a compound to the plants or the locus thereof.